

# Raised Panel Plates

Durable engraved sign making  
Engraved plate replacement

## TECHNICAL DATA SHEET

Revision Number. 1  
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Verstile productline built with latest technology to consistently achieve superior results with exceptional quality. The panel plates are printed using thermal transfer printing technology and designed to replace engraved type plates. Printing is quicker, more efficient and cost effective, while the results are durable and long lasting and the foam adhesive are high tack. Adjust very well to rough or curved surfaces. Identify : cabinets, patch panels, components and more

- \* High scratch and rub resistance
- \* Name plate quality and faster than engraving
- \* Ware House Marking
- \* Professional look with sharp and crisp legends
- \* Gloss finish and foamed backed adhesive for strong holding for uneven surfaces

\*\*Resistant to weak acids, greases, oils, salt spray, cleaners, detergents, and general industrial grime.

## Industry



Industry



Marine



Wind power



Commercial



Aerospace



Construction



Railway



Military



Electrical installations



Petrochemical



Telecom

## STANDARD COLORS



## OTHER COLORS



## MATERIAL

Top-coated thermal transfer printable polyester film with a permanent pressure sensitive acrylic adhesive mounted with a compressible foam carrier and backed with a glassine release liner.

## ADHESIVE

Solvent based permanent acrylic adhesive

## TEMPERATURE RANGE

-40°C to 90°C (-40°F to 180°F)  
Application Temperature  
18°C to 35°C

## RECOMMENDED RIBBON

FTI-Y black  
FTI-HLD white

## SMUDGE & SCRATCH RESISTANCE

Good Smear Resistance

## RESISTANCE TO SOLVENTS

\*\*

## ROHS COMPLIANT

Yes

## APPLICABLE PRINTERS

CAB - EOS - SQUIX - A4+M

## HALOGEN FREE

No

## UL CERTIFICATION

On - Request

## STORAGE

From date of manufacture 2 years.  
Cool and dry in original packaging.  
Recommended temperature.70°F - 21°C - 50% RH - Relative Humidity

Prolonged storage at higher temperatures and / or higher humidity will shorten shelf life.

## APPLICATIONS

Developed to be used in normal Industry, Wind Power, Commercial, Construction, Electrical, Telecom and industrial signs etc.

## ENVIRONMENTAL

| PROPERTIES   | TEST METHOD                             | TYPICAL VALUE   |
|--|---|---|
| TEST with XENON lamp,<br>XENON (340nm)<br>- Light 65 ° c irradiation 0.50 W/m <sup>2</sup><br>duration xxx hours<br>- Light + Spray duration 0.60 W/m <sup>2</sup><br>duration xxx min | Visual Inspection<br><br>Mark adherence | No creasing or cracking<br><br>No visual effect. Good contrast and visibility |

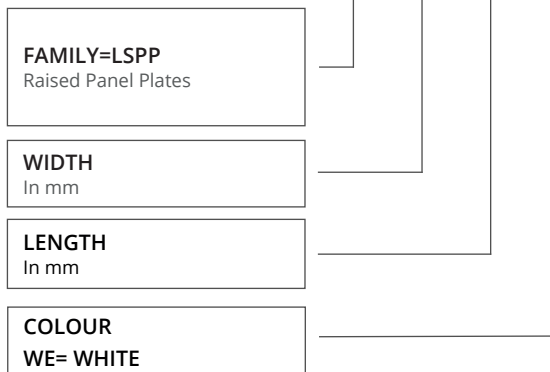
| PROPERTIES   | TEST METHOD                             | TYPICAL VALUE   |
|--|---|---|
| UV-A 340 nm 1000 hours Light 60 ° irradiation<br>0.76 W/m <sup>2</sup> power<br>duration 8 hours<br>- Spray duration 15 min.<br>- Condensation 50 ° duration 3,45<br>hour. | Visual Inspection<br><br>Mark adherence | No creasing or cracking<br><br>No visual effect. Good contrast and visibility |

## Ordering Info - Part Number Example

**PART NUMBER EXAMPLES** - Raised Panel Plates LSPP 45x15mm white

### Product code

**LSPP- -045 - 015 - WE**



# General Values for thermal transfer PP Film. Gloss clear -White- Silver

## THERMAL TRANSFER PRINTABLE FILM

| PROPERTIES            | TEST METHOD                            | TYPICAL VALUE   |
|-----------------------|--|-----------------|
| Dimensional stability | FTM 14 - 48 hours at 70°C on aluminium | <1 mm           |
| Facestock thickness   | FTM 12                                 | 50 micron ± 10% |
| Adhesive              | FTM 12                                 | 21 gsm ± 10%    |
| Chemical resistance   | AATCC 8 gray scale 1=poor 5 = superior | 3.5             |
| Elongation at break   | DIN 53455                              | 150 %           |

## FILM THERMAL

| PROPERTIES                | TEST METHOD | TYPICAL VALUE |
|---------------------------|-------------|---------------|
| Service Temperature Range | .....       | -40° - 149°C  |

## ADHESIVE PHYSICAL - High initial tack - shear strength - Good UV and ageing - good resistance to the influence of chemicals and solvents

| PROPERTIES  | TEST METHOD   | TYPICAL VALUE         |
|---|---|-----------------------|
| High initial tack - shear strength - Good UV  |   |                       |
| Resistance to plasticizers  | DIN EN 1939 on steel after 7 days storage at 70°C   | 13N/25mm              |
| Peel strength on lacquer  | DIN 1939 - room temp - 24 hours storage   | 39N/25 mm             |
| Hydrolysis resistance here excellent clarity, water, chemical or temperature resistance is required | Peel strength according to DIN EN 1939 after 7 days storage at 38°C, 100/ RH on<br><br>Steel<br>Polypropylene | 38N/25 mm<br>30N/25mm |

## ADHESIVE THERMAL - MODIFIED ACRYLIC ADHESIVE

| PROPERTIES                | TEST METHOD | TYPICAL VALUE |
|---------------------------|-------------|---------------|
| Operating Temperature     | .....       | -40° - +90°   |
| Labelling Temperature Min |             | 10°C          |
| Max Temperature           |             | 90°C          |

## SPECIFIC FOAM DATA - POLYETHYLENE FOAM

| PROPERTIES                | TEST METHOD                 | TYPICAL VALUE                                   |
|---------------------------|-----------------------------|---|
| Tack min - shear strength | DIN EN 1943 - 23°C on steel | 40,0 N / 625mm <sup>2</sup>                     |
| Tack Max - Peel strength  | DIN EN 1939 - 23°C on steel | 45.0 N /25mm                                    |
| Shore hardness            | ASTM D2240                  | 44  |
| Compression force         | (ISO 3386-1)                | 56kPa at 10% compression                        |
| Compression force         | (ISO 3386-1)                | 410 kPa at 50 % compression                     |
| Rest deformation          | (ISO 1856-C)                | 1 % at 25% compression: after 24h after release |
| Hygrosopicity             | ISO 2896                    | less than 1 %                                   |

## LINER DATA - POLYETHYLENE FILM

| PROPERTIES                              | COLOUR | TYPICAL VALUE             |
|---|--------|---------------------------|
| Polyethylen film                        | White  | approx. 0,08 mm thickness |
| Total thickness Liner - Foam - Adhesive |        | approx 0,53 mm            |